

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: wj5j@juno.com (John D Hensley)
Subject: 2BP1 scope tube & Manuals Needed
Message-ID: <19960805.215851.4823.4.wj5j@juno.com>

Hello Group,

The 2BP1 scope tube in my CV57/URR converter
needs to be replaced. Can anyone make one of
these available (trade, buy, reimburse, etc.)????

Also, looking for manuals for the following,
(clean copies will work for first four items):

1. Hallicrafters SP-44 Panadaptor
2. Hallicrafters HT-18 VFO
3. Heath HX-11 Novice xmtr
4. Eldico SBA-1 Sideband adapter
5. AN/URA-8 FSK demodulator (audio based)
6. AN/SRR-11 VLF receiver
7. AN/R390A HF receiver (EAC series)
8. Tektronics RM-16

Contact me via private email if you can help.
I'm willing to trade equipment for the last four
because they are large and almost beyond
copying.

73, Doug

***** WJ5J/NNN0BXX *****
WTB: National AN/WRR2/A or FRR-19 or R274x (SX-73)
Hallicrafters HT-20
WTF: Nat'l rack speaker, frame, NBFM & XCAL modules
Needed: KS1 p.s. for KL1; 2BP1 scope tube; EV664 ele
***** wj5j @ juno.com *****

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Aligning at 50.75KC
Message-ID: <UPMAIL03.199608062204350270@msn.com>

Karl KD5LR wrote about aligning the IF's in a SX-155 Halli.
I will answer only because I got this info from the list guys last year and I
don't have his direct E-mail.

Karl, use the BFO oscillator as your signal generator, You need a freq counter to set the frequency at or close to 50.75KC. Align the IF's and after that tune in WWV and set the bfo to zero beat.

It works Great.

Thanks to the guys on the list, not my idea, but I used it once.
Seems HeathKit did at one time in their assembly instructions.

Your Friend Al
fritsche@msn.com

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: Spencer Petri <spetri@e-tex.com>
Subject: Another odd sweep gen.
Message-ID: <m0unroA-0002GHC@e-tex.com>

Another interesting sweep gen is the TS-452 C/U. It covers 5-100 MC with plug in coils. Has a built in 3 inch scope. The osc is swept by a motor turning a var. cap. Sweep speed (motor) is controlled by knob on front panel.

This one is manufactured by:

Lewyt Manufacturing Corporation
Brooklyn, NY

Anyone else run across one of these?

73 de Pete WA5JCI

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: Bob Duckworth <rmd@ka4ybr.netmha.com>
Subject: Anybody here get my HA350 with extra filters?
Message-ID: <199608060506.BAA01939@ka4ybr.netmha.com>

I made a deal with a guy on rec.radio.swamp for a HA350 with some extra filters added on the back.

I'm not getting any replies to my mail.

Anyone here end up with it?

We agreed on a price. I've been mailing to see how much extra

to add for shipping. No response.

BTW, if anyone wants to chew me out for slow or no email response feel free. You can call too. 404-888-0389 :-)

73,
-bob
WB4MNF

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: kenc@smartdocs.com (Ken Corwin)
Subject: BC-224/BC-348 Receivers
Message-ID: <199608061459.HAA24894@warp10.smartlink.net>

Howdy, All-

Revision 6 to bc348.history is now in the BA archive. In addition to a few minor grammatical changes, we have a new high serial for the BC-348-K (thanks, Paul) and a new general reference (thanks, Bill, and, by the way, do you still plan to copy the "Airborne Radio Equipment Handbook"?).

The following information about these receivers is still really needed (any small part will be accepted with thanks):

BC-224-E	Manufacturer, order number, serial number
BC-224-G	Manufacturer, order number, serial number
BC-224-H	Order number
BC-224-K	Order number, serial number
BC-348-B	Order number, serial number
BC-348-E	Order number, serial number
BC-348-G	Manufacturer, order number, serial number
BC-348-AL	Did this ever exist, or was it an editorial ploy to intentionally mislead? See Air Force Manual 100-5, "Radio Receivers," 14 December 1956, page 81, "Schematic Diagram, Receiver BC-348 AL." It looks like the schematic of a BC-348-R.

Thanks for ANY information, no matter how unimportant it may seem to you.

Ken Corwin (kenc@smartdocs.com) Santa Clarita, Calif.

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: "Paul Bock" <pauboc@smtplink.pulse.com>
Subject: Books FS - Update 8/6/96

Message-ID: <9607068393.AA839348867@smtpink.pulse.com>

Here's the latest status on the books. Thanks to all who responded thus far, and sorry I couldn't help everyone out (coulda sold a dozen Jasiks!).

73,

Paul, K4MSG

"NAB Engineering Handbook," 4th edition, 1949. Classic volume covers AM and early FM & TV standards, operator licensing standards, logging requirements, antenna/transmitter/studio design, etc.. Large green binder, 2" thick, sections tabbed. VGC, \$50.00 OBRO

"Principles of Radar," MIT Radar School Staff, 3rd edition, 1952. Classic treatise on radar. Hardbound, VGC, \$20.00 OBRO

"Reference Data for Radio Engineers," ITT, 4th edition, 1956. Hardbound, GC (binding inside covers is loose). \$10.00 PPD

SOLD "Antenna Engineering Handbook," Henry Jasik, 1st edition 1961.

SOLD "Communications Networks, Vol. I, Ernst Gullemmin, 1931.

SOLD "Communications Systems and Techniques," Schwartz, Bennett, Stein

SOLD "Network Analysis and Synthesis," Louis Weinberg, 1962

SOLD "Analysis of Electric Circuits," Brenner & Javid, 1959

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: Larry Keith <KQ4BY@IX.NETCOM.COM>
Subject: Books/Literature For Sale
Message-ID: <320671D4.1B2A@IX.NETCOM.COM>

I have the following literature/books for sale:

ARRL Hints and Kinks, Volume 5, 1954, Poor condition
(stained and back cover missing) \$4.00

EIMAC "Build Your Own Transmitter" Booklet, 1947. A brief (11 pages) booklet on building your own broadcast transmitter. Includes schematics and notes. Excellent condition. \$10.00

EIMAC "Compact, Powerful 6-Meter Rig" Booklet, 1958. How to build a 4CX300A based 6 Meter AM/CW transmitter. Excellent condition. \$5.00

Electronic Engineering Principles by John D. Ryder, Ph.D., Prentice-Hall, Inc., 1947, 397 pages. Good condition. \$15.00

Electronic Instrumentation by Sol D. Prensky, Prentice-Hall, Inc., 1964, 534 pages. Good condition. \$15.00

Electro-Voice Specifications, Model 623 Microphone. Good condition. \$3.00

GE Ham News, March-April 1954. "More About Power Supplies." Good Condition. \$4.00

GE Ham News, May-June 1954. "Picking The Proper Insulation." Good Condition. \$4.00

GE Ham News, July-August 1954. "VTVM Adapter." Good condition. \$4.00

GE Ham News, September-October 1954. "Low-Noise 220 Megacycle Converter." Good condition. \$4.00

GE Ham News, November-December 1954. "600-Watt All-Band Amplifier." Good Condition. \$4.00 (2)

GE Ham News, January-February 1955. "Announcing Operation Crystal -- a challenge to all radio amateurs." Good condition. \$4.00

GE Ham News, March-April 1955. "High Attenuation Low-Pass Audio Filter." Good Condition. \$4.00 (2)

GE Ham News, November-December 1956. "The Mix-Selector Chart." Good Condition. \$4.00

GE Ham News, January-February 1957. "The Directional Beam Antenna." Good Condition. \$4.00

GE Ham News, March-April 1958. "Double Sideband

Junior." Good Condition. \$4.00

GE Ham News, March-April 1961. "The SSB-600 Grounded-Grid Linear Amplifier." Good Condition. \$4.00 (3)

GE Ham News, July-August 1962. "A Completed 20-Watt, 144-MC. SSB Exciter." Good Condition. \$4.00

GE Ham News, Spring, 1963. "KCS Compactron Amateur Band Receiver" Fair Condition. \$3.00

GE Techni-Talk, Spring 1963, "How to Measure HV Rectifier Filament Voltage." Good condition. \$4.00

GE Television Picture Tubes Replacement Guide. 12 page (envelope size) listing of TV picture tubes with basing diagrams. Can't tell the year. Tubes listed include 8" metal round tubes through 27" glass rectangular tubes. Good condition. \$2.00.

General Radio, Operating and Maintenance Instructions for type 1932-A Distortion and Noise Meter, good condition. \$5.00

Lakeshore Industries Band-Hopper VFO Operating Manual, Good condition. \$5.00

RCA Ham Tips, June-July 1953, "A Bandpass Transmitter-Exciter Using an RCA 6146". Good Condition. \$4.00

RCA Ham Tips, Aug-Sept 1953, "A Bandpass Transmitter-Exciter Using an RCA 6146, Part II" Good Condition. \$4.00

RCA Ham Tips, Dec 1953, "A Precision "Slick Whistle" for 3.5 to 4 Mc.", Good condition. \$4.00

RCA Ham Tips, Mar-Apr 1954, "Design Tables for Low- and High-Pass Filters for the Reduction of TVI." Good Condition. \$4.00

RCA Ham Tips, Dec 1954, "Determination of Typical Operating Conditions for RCA Tubes Used as Linear RF Power Amplifiers." Good Condition. \$4.00

RCA Ham Tips, Mar 1956, "Ham-Band Charts." Good Condition. \$4.00

RCA Ham Tips, Feb 1957, "Automatic CONELRAD Alarm" Good condition \$4.00

RCA Ham Tips, Apr 1957, "RCA Publications For Hams." Good condition. \$4.00

Sylvania, "How to Service Radios with an Oscilloscope", 71 pages, good condition. \$10.00

T0 33A1-13-19-1, Instruction Book, Oscilloscope OS-8/U, Fair condition \$10.00

T0 33A1-13-19-11, Instruction Book, Oscilloscope, OS-8C/U, Good condition. \$12.00

All prices include postage to U.S. addresses. Contact me via e-mail if you are interested.

And, I am open to offers for multiples or the whole thing...

73,

Larry, KQ4BY
KQ4BY@IX.NETCOM.COM

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: roecker.greg@ist.mds.lmco.com
Subject: Central Electronics Info
Message-ID: <Chameleon.960806105623.greg@roeckerpc.acc.atl.mmc.com>

I have finally found a CE 200V, and am in the process of repairing, restoring, and putting it back on the air. It arrived in one piece, but has been the "Nightmare on Elmstreet" so far. I have replaced more parts than I care to count. With alittle luck, and the replacement of that coxial capacitor in the final circuit (original was shorted!!!), it should be back on the air in no time . . .

I am looking for information about the 200V. I understand that Electric Radio ran several articles on it sometime back. Can someone tell me what issues those were? I would like to get copies (will pay for repo & mail). Also, does anyone have info on upgrades, or mods that were for the 200V??? Adding a 160

meter coupler??? I would like to get copies of these.

Thanks, and 73,

Greg Roecker / N40SJ
100 Chickering Parkway
Roswell GA. 30075

roecker.greg@ist.mds.lmco.com

Greg Roecker
E-mail: roecker.greg@ist.mds.lmco.com
Voice: 770.668.1245
Fax: 770.698.5220
From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: mirage!pamars@uucp-1.csn.net (P.A.Marshall)
Subject: Re: Central Electronics Info
Message-ID: <9608061459.AA21314@mirage>

ist.mds.lmco.com!roecker.greg writes:

>
> I have finally found a CE 200V, and am in the process of
> repairing, restoring, and putting it back on the air.

> I am looking for information about the 200V. I understand that
> Electric Radio ran several articles on it sometime back. Can
> someone tell me what issues those were? I would like to get
> copies (will pay for repo & mail).

Greg,

Contact Barry at ER, issues are 3.25 each, making copies of something
still in print just makes it that harder for the publisher. Barry's
address is er@frontier.net or give him a call 1+907.247.4935.

Al Marshall	"Real Radios Glow in the Dark"	almarshall@acm.org
1+219.665.5072	Mirage Computers, Inc.	pamars@mirage.angola.in.us

"The lyf so short, the craft so long to lerne." - Chaucer

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: Michael Crestohl <mc@shore.net>
Subject: Collins KWM-2/2A power supply & console answers.....
Message-ID: <199608060238.WAA14391@northshore.shore.net>

From: george.rybicki@lerc.nasa.gov (George Rybicki)

>I have a shot at a nice KWM-2. I Thought these needed a outboard power
>supply, ie the 516F2, but the seller says it has a PS that fits on the back
>of the unit. Can anyone enlighten me on this,

Yes. This is the PM-2 power supply that is used when the KWM-2/2A was
set up in the CC-1 Carrying Case.

Tony Stalls K4KY0 told me that when he was a US Secret Service agent he
saw CC-1s and CC-2s being loaded and unloaded from Air Force One up into
the 1980s.

The Army brought the KWM-2A stations out of mothballs during Desert Storm
after the fancy sand radios failed to perform in te desert (did sand get
in the sand?)

>is this just a 50 watt supply or is it the equal of a 516F2? It also comes
>with a station console which I guess is a power/swr meter and phone patch.
>I have seen the KWM-2 at hamfest in the \$400-500 range, is that about right?
>Whats the console worth? Thanks for the help

The PM-2 is adequate for SSB operation. The 516F-2 is a much heftier
supply and you can use the KWM-2A for RTTY operation with this supply.
Personally I prefer the 516F-2 supply but have the PM-2 for the suitcase
station configuration.

The 312B-4 Console was part of both the KWM-2/2A and S-Line station. It
contained a Wattmeter, directional coupler, loudspeaker and phone patch.
The 312B-5 was a special console for the KWM-2/2A as it also had a separate
VFO to allow the KWM operator to work split frequencies. The prices
and values depend upon age and condition. Recently the government
surplused off much of the FRC-93 station setups and so some of the 312B-4
and -5 consoles are ex-military/government units in varying degrees of
condition and appearance. I would say that a winged emblem 312B-4 should
be worth \$100.00. There was also a console that was missing the wattmeter
and the phone patch called the 399-C I believe....

Hope this helps.....

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
Subject: collins radio for sale

----- Forwarded message ends here -----

Dick Dillman

WPE2VT N6VS ex-WA2BJK
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Foam-in-place Packing Foam
Message-ID: <Pine.ULT.3.91.960806112025.163B-100000@dua150.kpt.emn.com>

On Mon, 5 Aug 1996, Terry Burge asked about "desolving styrofoam". [I am sure Terry's brain works faster than his fingers - or at least that is what I use as an excuse with my arthritic fingers! :-)]

Styrofoam peanuts and such are easily dissolved by acetone and many other solvents. Unfortunately what I think Terry is asking about is the "foam-in-place" packing foam. This is a thermosetting material and it has very limited solubility in most solvents. His question is almost identical to one Mikhael Brown asked me, so the following is a copy of my previous reply.

> Date: Fri, 28 Jun 1996 12:21:53 -0400 (EDT)
> From: "Barry L. Ornitz" <ornitz@eastman.com>
> To: Mikhael Brown <mikhael@hpcmmmp13.sj.hp.com>
> Subject: Re: Foam Packing Problem
>
> Unfortunately Mike, I think there is little you can do. This foam
> polymerizes (cross-links) upon exposure to moisture. [Ever wonder why it
> does not set up in the can?] In this state, it is fairly resistant to
> solvents. Before it cures, acetone does a fair job in cleaning it up.
> However I suspect that any solvent that would attack the cured foam would
> also attack the paint too.
>
> A good stiff brush might remove most of the foam and make its damage less
> noticeable. If the damage was done by a commercial shipper, I would ask
> him to cover most of the expense of repairing the painted surface.
>
> I wish I could be more optimistic but I really cannot think of anything
> better.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: Terry Burge <terrybu@netman.ENS.TEK.COM>
Subject: Re: Foam-in-place Packing Foam
Message-ID: <9608061606.AA17767@netman.ENS.TEK.COM>

As I stated in my first post...

'shipped to him using the spray in styrofoam and the plastic bag covering the radio leaked the stuff onto the radio...'

This is the spray in styrofoam that expands and hardens. Great stuff as long as it does not leak. A couple of people on the net have said that gasoline will cut this (and be careful of the paint). Also Xylene (and be careful of the paint). And one person said a polyurethane stripper (and be careful of the paint). Anyone for taking odds?

If Barry is right maybe nothing will work to cut it without stripping off the paint too. I'll give the responses I got to my friend and let him go for it as best he can. As I said, he has already tried acetone and paint thinner without any success.

Terry

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: Glenn Finerman <GFINER@nms.com>
Subject: FS - TRADE
Message-ID: <s2077648.002@nms.com>

Greetings 811A fans!

I have for sale or TRADE a mint condition Ameritron 811amplifier. Three 811A's produce 500W out with 40W drive. 160 - 10 meters including WARC bands. Less than 12 hours use. Like new! \$475.00 plus UPS or trade for anyone of the following;

Collins 75A4, 75A3, 32V2, 32V3, 32S2, 32S3

Glenn Finerman N2BJG gfiner@nms.com

E-Mail or phone 914-357-5419 between 6pm and 10pm east coast time
(NYC area Rockland Co.)

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: Re: FS: Heath AMATEUR Manuals
Message-ID: <Pine.GS0.3.93.960805151902.9084C-100000@uhunix5>

Bill has a manual listed for an "HX-11 CW transmitter."

What was it? Someone please provide a complete discription. Don't

leave anything out!

Jeff KH2PZ / KH6

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "James P. Rybak" <jrybak@mesa5.Mesa.Colorado.EDU>
Subject: FS: Brand New Variac
Message-ID: <Pine.SV4.3.91.960805210430.20175B-100000@mesa5.mesa.colorado.edu>

I have a brand new model W20H Variac for sale. The manufacturer is Technipower. It's designed to provide either 0-240 volts or 0-280 volts (depending on how you wire it up) at a steady 8 amps from a 240 vac, 50-60 Hz. supply. However, it of course can be connected to a 120 vac, 50-60 Hz. supply to provide either 0-120 volts or 0-140 volts at 8 amps. Another option is to connect 120 vac to the input and get 0-280 vac out at 4 amps.

This is a panel mount model with no enclosure but of course a suitable enclosure could be built easily. A complete template and full instructions are included as is the dial plate. As I said initially, it is brand new. The price is \$65 firm plus shipping on 25 pounds.

This is just the ticket for bringing up the voltage on those old ba rigs slowly.

Jim Rybak W0KSD

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
Subject: FS: Collins, Hallicrafters, HyGain

Collins 75S1.....\$295 + shipping

Hallicrafters HT37.....\$90 (pick up only)

Nearly new HyGain 14AVQ.....\$75 (pick up only)

All items in good condition and working order.

Devon Crowe
KK4TT
dcrowe@lpl.arizona.edu

Tucson, AZ
520-621-2378

----- Forwarded message ends here -----

Dick Dillman
WPE2VT N6VS ex-WA2BJK
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: Neal McEwen <nmcewen@metronet.com>
Subject: FS: Drake 4C line tube replacements
Message-ID: <3206AFC4.2649@metronet.com>

Hello BAers,

I'm still cleaning up/out. Found some of Howard Sartori's solid state tube replacements for the Drake 4C line. I have (3)x 12AX7-1 for Mic Amp / VOX Amp and (1)x 6AU6 for sidetone and AM modulator.

Howard sold these for \$18.95 apiece. You can have all four for the same price.

Still using my C-line and still going strong for 21 years

--

73 de K5RW, Neal McEwen nmcewen@metronet.com - Richardson, TX (Dallas)
WWW Page for Telegraph Key Collectors and Historians
<http://fohnix.metronet.com/~nmcewen/ref.html>

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: gpewitt@execpc.com
Subject: Re: FS: Heath AMATEUR Manuals
Message-ID: <Chameleon.960805215354.gpewitt@execpc.com.execpc.com>

5 band CW transmitter Manufactured 61 to 63. Very rare.
DX 20 in new clothes. ref Penson's book on Heathkits.
Page 156.

Name: Gary Pewitt N9ZSV Milwaukee
E-mail: gpewitt@execpc.com
From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "William C. Robbins" <billrobb@serv01.net-link.net>
Subject: FS: Heathkit Test Manuals
Message-ID: <199608052338.TAA27856@serv01.net-link.net>

My son Matt has the following Heathkit test equipment manuals for sale.

All manuals are \$7 each, shipped. If you are interested in any of them
e-mail Matt direct: N8UGD@serv01.net-link.net

GD-125	Q Multiplier
IB-28	Impedance Bridge
IB-101	Freq. Counter
IB-1101	Freq. Counter
IB-1103	Freq. Counter
ID-1590 / ID-1590E	Wind Speed Direction Indicator
ID-4101	Electronic Switch
IG-37	FM Stereo Generator
IG-5282	Audio Generator
IM-103	Line Voltage Monitor
IM-104	Solid-State VOM
IM-105	Volt-Ohm-Milliammeter
IM-1104	Solid-State VOM
IM-1202	Digital Multimeter
IM-1212	Digital Multimeter
IM-2410	Freq. Counter
IM-4100	Freq. Counter
IM-5238	AC Voltmeter
O-12	Laboratory Oscilloscope
IO-4105	5 mhz Oscilloscope
IP-2710	30 V, 3A Power Supply
IP-2715	Battery Eliminator
IP-2760	Battery Eliminator

Thanks,

Bill

William C. Robbins, WA8CDU
billrobb@serv01.net-link.net

Heathkit Collector

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: Karan Lee Carruth <klccarru@tenet.edu>
Subject: FS: RCA Strato-World Mk I
Message-ID: <Pine.OSF.3.91.960806104450.22902B-1000000@Joyce-Perkins.tenet.edu>

Model RZM198E, Excellent condition. E-Mail me direct if interested.

Lenox, WA50VG

klccarru@tenet.edu

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "Lahlum-FLR111 Ross" <ross_lahlum@msmail.wes.mot.com>
Subject: FW: FS: Mil BA Multimeters
Message-ID: <9608060312.AA21028@kay.wes.mot.com>

From: Lahlum-FLR111 Ross on Mon, Aug 5, 1996 09:46
Subject: FS: Mil BA Multimeters

I have several military multimeters for sale (gotta clear a path in the shack ;-). There are several TS352 B/U's which consist of a ME9H/U (or G/U) multimeter and a MX-815 B/U, multiplier, both in a heavy cast aluminum case with snap-on cover. These look fairly old, I would guess '60s vintage. Definitely boatanchor stuff! They appear to be in good condition, except for scratches and mars on the outside of the case.

I don't know what to ask for them, so make an offer!

73,
Ross

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Fwd: collins radio for sale
Message-ID: <75581.ddillman@igc.apc.org>

----- Forwarded message begins here -----

From: Henry Franzreb <FXGT86A@prodigy.com >
Newsgroups: usenet.rec.radio.swap
From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Fwd: FS: Collins, Hallicrafters, HyGain
Message-ID: <75585.ddillman@igc.apc.org>

----- Forwarded message begins here -----

From: Devon G. Crowe <dcrowe@lpl.arizona.edu >
Newsgroups: usenet.rec.radio.swap

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Fwd: Hallicrafters SX-62
Message-ID: <75576.ddillman@igc.apc.org>

----- Forwarded message begins here -----

From: Sean Weitzel <sweitzel@best.com >
Newsgroups: usenet.rec.radio.swap
From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Halli SX-115, -117 etc. 50 kHz IF alignment
Message-ID: <01I7YIW0VH7M0001XJ@ACS.EKU.EDU>

Gang:

Someone had a problem with aligning an SX-115 50.75 kHz IF since his (and most) signal generator did not go that low.

Concerning the problem of aligning the Hallicrafters SX-115 50.75 kHz IF, Halicrafters provided the following procedure which I have used successfully on the SX-101A and the SX-117. It may also be used for the SX-100 MK II and the SX-115:

FIELD ALIGNMENT PROCEDURE FOR 50.75 KC IF SYSTEMS
SX-117, SX-115, SX-101A, SX-100 MK II

- STEP 1. Turn on crystal calibrator.
- STEP 2. Center BFO frequency exactly so that switching from upper to lower side causes no change in zero beat. Set selectivity to the half kilocycle position.
- STEP 3. Set sideband selector for lower sideband and tune receiver dial slightly higher in frequency than the zero beat point (until a beat note is heard).
- STEP 4. Make a parallel connection to the loudspeaker [or set up with a separate speaker close by - AIT] with an audio frequency oscillator set to 750 CPS and tune receiver dial until audio pitch of receiver is the same as the AF oscillator. This condition is noted by the wavering beat between the two tones coming within a few CPS.
- STEP 5. Reduce RF gain so that approximately S-6 to S-7 is indicated on the "S" meter. Adjust four coil slugs on 50 KC transformers for maximum "S" meter indication. This

completes the alignment of the 50 KC system.

In the SX-117, due to the AVC circuitry used, the "S" meter will not correctly indicate the peak of coils number three and four. Therefore, all IF coils should be peaked for maximum audio output @ 750 CPS.

My signal generator also does not go down to 50 kHz, but I do have a good audio signal generator and the procedure worked just fine for me. It helps if you are a musician and used to tuning instruments to the same pitch - listening for the "beat" note between tow pitches untio the beat note stops (or is going very slowly).

And if you do not have an audio signal oscillator you can use, you can try tuning it to a piano: I did not check the exact pitch (you can do that) but the treble clef fifth-line F should be pretty close to the 750 Hz (F above C above middle C).

73, Al N5AIT
modsteph@acs.eku.edu
Richmond, Kentucky

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: w5tvw@juno.com (Sandy Blaize)
Subject: Re: Halli SX-115, -117 etc. 50 kHz IF alignment
Message-ID: <19960806.151326.8087.13.W5TVW@juno.com>

For those who don't have a URM-25 or something that goes down to 50 khz, take a look at your audio generator! Many of these go up to 100 Khz. or 1 Mhz. These will do a nice job of generating that 50 khz signal, although the attenuators are not quite a good as some of the RF generators.

73,
Sandy Blaize, W5TVW
Boat Anchors collected, restored, modified, traded & used!
w5tvw@juno.com
417 Ridgewood Drive,
Metairie, LA., 70001.

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: k7yha@juno.com (Richard H. Arland)
Subject: Hallicrafters SX-140/HT-40 FS

Message-ID: <19960806.105250.4447.0.k7yha@juno.com>

Mike:

Due to a glitch in my Juno software, I have lost your e=mail address.
Please repost to me ASAP.

The cases are being painted Wednesday. All sandblasting and priming has been done. If you want the HA-1 T.O. Keyer, please advise me. All three cabinets will be matching paint jobs.

73 rich K7YHA

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
Subject: Hallicrafters SX-62

I recently aquired one of these units. Aside from being a bit dusty, It functions perfectly. Cosmetically it is perfect. Most of the vacuum tubes are original..

Anyone interested in it? Make me an offer..

-sean

----- Forwarded message ends here -----

Dick Dillman
WPE2VT N6VS ex-WA2BJK
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Re: HP130C
Message-ID: <Pine.SUN.3.91.960806155933.28458A-100000@indy3>

Hi!

Let me add a "me, too!" to Ross's request--there's a fair-to-good lookin' H/P 130C on the bench here at the transmitter that wants a manual. Makes a decent trace--it's going to be a nice audio phase monitor for the TV station! (Commercial ones come with highly misleading peak-reading meters and the 'scope display's not as big. 'Druther just have a good AF 'scope, which this is).

There's a mil-spec round connector on the back labelled "signal input" that I'm especially wondering about. Seems to be a factory option, as the label is a printed stick-on type.

...Darned if H/P didn't paint the thing Tek blue! I was expecting tan as usual--do you suppose they were hoping it was a magic scope color? ;) (Also has a tag reading AIRESEARCH or A I RESEARCH on the back. Sure hope it can't beat me at checkers!)

Anyhow, if you've an H/P 130C 'scope manual, I'm interested in a copy, and will cover costs, postage, etc.

73,
--Bobbi

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: HW-16 keying question
Message-ID: <Pine.GS0.3.93.960806113547.5954A-100000@uhunix5>

The HW-16 uses grid-block keying. Now looking at the schematic, I see that the receiver input is not removed from the antenna jack while transmitting. Rather, there is (what Heath calls) a diode switch that apparently removes the xmtr's output from the rcvr's input. That diode goes to the cathode of the final tube (a 6GE5). Can someone explain to me how this diode switch operates? I have visions of frying the RF amp in the rcvr.

Why wouldn't that diode also attenuate RF coming into the rcvr while in the receive mode?

Still asking Novice questions 20 years later,
Jeff KH2PZ / KH6

P.S. Anyone have a spare NOS/NIB 6GE5 (and a spare 6CL6 - that's the driver)

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: w5tvw@juno.com (Sandy Blaize)
Subject: Re: Mackay 128AW receiver
Message-ID: <19960805.175102.8087.7.W5TVW@juno.com>

The Mackay 128 was the predecessor to the Mackay 3001 receiver. They are both virtually the same animal. It will work with 110v ac/dc or with 12 vdc and 90 vdc. They were fitted to merchant marine ships as the emergency receiver. I may be able to get you a schematic if you want. The 3001 receivers and a couple of 128's were used on the last US built

Lykes Lines ships, Waterman and Delta Line ships. (Among others) All the Lykes ships were sent to India a year or so ago to be scrapped! (I wish I'd been able to raid the 'spares' locker before they went!) There are probably still some old Lykes ships (circa late 50's early 60's) laying to at a mothball/boneyard at Beaumont.

I spent many a time checking/repairing these things before annual FCC inspections! Unfortunately, they are rather of limited worth now as the 400-500 khz ship CW band is next to extinct now, and is scheduled to go officially QRT in 1999. All the other nice CW stations waaaaay down there in frequency have gone RTTY. Ain't nuthing much to listen to in that range any more!

73,

Sandy Blaize, W5TVW (Former Service Engineer for Mackay)
Boat Anchors collected, restored, modified, traded & used!
w5tvw@juno.com
417 Ridgewood Drive,
Metairie, LA., 70001.

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: "Charles R. CHIP Veres 305-532-4515" <VERESC@mail.firn.edu>
Subject: Re: Mackay 128AW receiver
Message-ID: <C76ZWKSJBJDU*/R=FIRNVX/R=A1/U=VERESC/@MHS>

Not so fast , Sandy ;-) There are still the non-directional beacons for boat and plane navigation. Some freaks (like me) think they make ideal DX targets because they just sit and identify themselves all night & all day.

73, Chip

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: wb6zwc@ns.net
Subject: Millen GDO 90651
Message-ID: <199608061617.JAA17401@tomcat.ns.net>

Works fine. All coils. \$110 shipped.

=====

Wanted 312-B3
Richard@Sacramento,Ca.

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: kilgore@dev.tivoli.com (Jeff Kilgore)

Subject: NC-270 prices

Message-ID: <9608061348.AA01495@wichita.tivoli.com>

A friend of mine is thinking of getting an NC-270 (his first receiver from his Novice days) and would like to know the going rate for one in good cosmetic and electrical condition. He's not into working on radios, so he needs one that already works reasonably well.

73,

Jeff Kilgore, KC1MK

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996

From: "Andy Howard, WA4KCY" <102452.362@CompuServe.COM>

Subject: Need Bottom Plate for BC-611

Message-ID: <960806034719_102452.362_DHT69-1@CompuServe.COM>

Hi Gang,

Looking for the bottom plate for a BC-611. Also could use strap and hanger bolts to attach strap and bottom plate.

Thanks,

Andy Howard, WA4KCY

wa4kcy@usa.net

Carrollton, Georgia

AMI #9

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996

From: "Dick Dillman" <ddillman@igc.apc.org>

Subject: Noise Contest

Message-ID: <75571.ddillman@igc.apc.org>

As I've mentioned in these pages, I now have the local power company on the track of my "frying egg" noise level that increased by two or three times recently.

But during the first check for noise, in which the power company guy selectively turned off the power to the other three units in my building, another noise, one that I've lived with for years and that I thought was coming from the local TV transmitting tower, disappeared! I don't know yet what it was (company policy forbids divulging the number of the offending apartment) but I'll set forth

the characteristics and we'll see who makes the closest guess when the villain is finally unmasked.

The signal appears over the entire 3 to 30 Mc/s spectrum. It's modulated with what sounds like a rough, burbly 60 cps note. It is not continuous across the spectrum but appears about every 200 kc/s and is about 120 kc/s wide.

Noninations, please!

Dick Dillman
WPE2VT N6VS ex-WA2BJK
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "Andy Howard, WA4KCY" <102452.362@CompuServe.COM>
Subject: Re: Noise Contest
Message-ID: <960806032359_102452.362_DHT82-1@CompuServe.COM>

> villain is finally unmasked.
>
> The signal appears over the entire 3 to 30 Mc/s spectrum. It's
> modulated with what sounds like a rough, burbly 60 cps note. It is
> not continuous across the spectrum but appears about every 200 kc/s
> and is about 120 kc/s wide.
>
> Noninations, please!

Hi dick,

I had a similar problem here. It turned out to be the doorbell transformer. Because they buttons on the outside are lit there is a small load on the transformer at all times. This may not be your problem but it sure gave me fits. I was out looking for power pole problems with my 2 meter handheld which was picking it up also. Just happened to notice the light on the doorbell transformer blinking on and off at a regular interval. The same interval that I was hearing on the HT.

Regards,

Andy, WA4KCY

>
>
> Dick Dillman
> WPE2VT N6VS ex-WA2BJK

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: knudsen@gvmail.ih.lucent.com
Subject: Noise Contest
Message-ID: <9608061635.AA04925@bock.ih.lucent.com>

Congrats to Dick for sticking to his guns and getting
the local juiceworks to track down the interference sources.

In my area (home?) there's a similar signal, a raspy burbly
60-Hz mess that pops up every 150 (or is it 250?) KC or so.
Very strong in 75M band. And then about 20 MC it or a cousin
reappears and puts "markers" all the way up thru 30 MC, so
that I cvan't just spin the dial up there and see if 10M
is open.

I've suspected our fancy answering machine, and tried unplugging it,
but it has battery backup so the microprocessor keeps running.
I'd advise hams/SWLs to stick to old-fashioned machines with tape
and no fancy controls and features.

Another big QRMer in my house is the cordless phone.
Evenw hen not in use, its little micro constantly sweeps
at 15.0 MC (perfectly zero-beated with WWV, buy someone a cigar!),
with an interested pattern that for months made me think it
was a local paging station. I unplug its AC adapter when
I want to do serious SWLing, tho it doesn't get into
my outdoor antenna nearly so bad.

And FWIW, egg-frying is a standard feature of my local power lines,
especially 14-18 MC. I have roughly 12 KV power lines plus
220V secondaries at the back end of my yard, thankfully
at right angles to my Sloper antenna.

Good luck es 73, mike k aa9rg

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: john <johnmb@mindspring.com>
Subject: OK BA-ists take note!
Message-ID: <2.2.16.19960806064303.29179d9a@pop.ral.mindspring.com>

>Return-Path: glowbugs@theporch.com
>Date: Mon, 5 Aug 1996 15:44:00 -0500 (CDT)
>Errors-To: ws4s@midtenn.net
>Reply-To: vmike@master.ceat.okstate.edu

>Originator: glowbugs@theporch.com
>Sender: glowbugs@theporch.com
>From: vmike@master.ceat.okstate.edu
>To: Multiple recipients of list <glowbugs@theporch.com>
>Subject: parts for sale
>X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
>X-Comment: Please send list server requests to listproc@theporch.com
>
>
>
> Greetings,
> I am putting up for sale a bonanza in tube builders supplies.
> Anyone interested in looking and making an offer, who is willing
> to make a journey to Stillwater, Ok will pick up bargains.
> I have and wish to sell: tubes, transformers ie,; power, mod,
> chokes, audio, power supply caps, variables, other fixed, chassis,
> b/a test equipment, b/a ham and commercial equipment, mil radio
> stuff, and more.
> I will not catalog and ship, my time would be better spent digging
> a hole to push this stuff in. (in my experience)
> If anyone's interested reply via e-mail or call daytime 405-744-8392
> Everything will sell cheap!
> 73,
> mike
> W00CTA
> feel free to cross post this.
>
>

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: mack@mails.imed.com
Subject: PACO E-400 Manual
Message-ID: <9607068393.AA839346686@mails.imed.com>

It looks like several of us have E-400 sweep generators. I am making a copy for Larry and it is just a matter of putting more paper in the copier if someone else needs an operators manual.

I have never figured out why folks would need to align a TV or FM radio. The *FIRST* advice I was ever given is that alignment is absolutely the *last* thing you do to get a receiver working.

>From the dates on my manual and remembering when my father started his TV business, I'd guess mine is circa 1958. The date on the schematic (a true engineering drawing) is 6/1/54. It is also interesting to note that an example shows the TV IF in the 23-25 Mc range.

Ray Mack
WD5IFS
mack@mails.imed.com
Friendswood (Houston), TX

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: Michael Crestohl <mc@shore.net>
Subject: Question: What equipment goes with CS-137 Crystal set???
Message-ID: <199608060311.XAA24525@northshore.shore.net>

I have a set of 120 crystals in the FT-243 holder that cover from channel number 270 (5.675 Mc) to channel 389 (8.650 Mc) in 25 Kc increments. They were stored in the CS-137 case. Anyone know what radio set these crystals were used?

Anyone interested in buying the set of 120 crystals @ \$30.00 which is .25 a rock) plus UPS? The CS-137 is not included.

73,

Michael Crestohl, KH6KD/W1
mc@shore.net

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: w5tvw@juno.com (Sandy Blaize)
Subject: Re: Question: What equipment goes with CS-137 Crystal set???
Message-ID: <19960805.230819.8087.0.W5TVW@juno.com>

This set of crystals was used with the BC-1335 transmitter/receiver for one I know! The numbers marked on the top of the crystals are the frequency the crystal produces in that radio. 27.0-38.9 Mhz. in 0.1 mhz. steps! There is a nice run of 40 meter crystals in there every 25 khz. Also there is a range of rocks for 6 meters and 2 meters as well. Your price is a very good buy if they are in good shape!

73,

Sandy Blaize, W5TVW
Boat Anchors collected, restored, modified, traded & used!
w5tvw@juno.com
417 Ridgewood Drive,
Metairie, LA., 70001.

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996

From: dj@bllac.JPL.NASA.GOV (Dayton Jones)
Subject: Radio Club of America
Message-ID: <199608052211.PAA14635@bllac.jpl.nasa.gov>

Someone asked about the "other" RCA a week or so ago. I have an old (1991) copy of the Proceedings of The Radio Club of America, which lists their address as 45 South Fifth Street, Park Ridge, NJ 07656.

Dayton Jones, NT6S
(dj@bllac.jpl.nasa.gov)

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: RE^2: Do you drive your BA?<re-directed>
Message-ID: <Pine.ULT.3.91.960805202444.27705E-100000@dua150.kpt.emn.com>

On Sat, 3 Aug 1996, Jim Lockwood KM6NK wrote:

> As I understood it, his transmitter had only two tubes.....a crystal
> oscillator (I think) and the power amplifier. He was using a carbon
> mike (which sounded amazingly good) in what I think he said was "Taylor
> modulation" (I'm not sure of the name).
>
> So, with two tubes and a carbon mike, my question for the group is, "How'd
> he do that?"

My guess is that the final was either grid-modulated or suppressor modulated. Neither give very good efficiency or linearity but they require virtually no driving power from the audio source. I have a schematic at home for a one tube AM rig for 6 meters using a receiving pentode such as a 6BH6. The suppressor grid has an adjustable pot to provide bias which is fed through an audio output transformer's primary. A carbon microphone and a 1.5 volt battery feed the transformer's low impedance secondary. Of course, the transformer is now used in reverse as a step-up transformer. Power output is likely a fraction of a watt.

There are very few power pentodes suitable for suppressor modulation. The venerable 813 is one of the few that come to mind. Beam power tubes, if the beam forming electrodes are not connected to the cathode, may be used as suppressor-modulated pentodes but much higher driving voltages will be required than for real gridded pentodes. Modulation is not very linear and a scope should be used to initially set up the modulation.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

Is there any chance KM6_00_NK will be in Georgia long enough to attend the Shelby hamfest on Labor Day weekend?

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Re^2: Foam-in-place Packing Foam
Message-ID: <Pine.ULT.3.91.960806121154.1569A-100000@dua150.kpt.emn.com>

On Tue, 6 Aug 1996, Terry Burge wrote:

> This is the spray in styrofoam that expands and hardens.

It is most definitely not styrofoam which is foamed polystyrene, a thermoplastic soluble in many solvents. It resembles styrofoam but is chemically quite different. Squirt some acetone on real styrofoam to see the big difference.

> A couple of people on the net have
> said that gasoline will cut this (and be careful of the paint).

Not very likely except on the uncured material. [See the comments below about aromatic and aliphatic solvents. Gasoline has a large fraction of aromatics.]

> Also Xylene (and be careful of the paint). And one person said a
> polyurethane stripper (and be careful of the paint). Anyone for taking odds?
> As I said, he has already tried acetone and paint thinner without any
> success.

Xylene is an aromatic solvent (similar to benzene and toluene). I expect it may soften the foam slightly but not really dissolve it. Depending on the kind of paint underneath, expect paint damage.

Since the packing foam is based on urethane chemistry, a polyurethane stripper will likely remove it - and any paint underneath too. A lot will depend on how long the foam has had to cure. Since moisture activates the polymerization reaction, I would expect the material to be fully cured. This particular Bfoam has virtually no resistance to intense ultraviolet light. Of course, this will fade the paint beneath too!

I usually advise people to try acetone first since it is fairly aggressive as a lacquer remover while not often destroying enamel paint underneath. It is VERY flammable but not exceptionally toxic. Paint thinner is a mixture of compounds with a composition similar to a refinery

gasoline/kerosene distillation cut. The aromatic components in it are pretty good solvents, but the aliphatics will dissolve virtually no _cured_ paint.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: Robert Ross
Message-ID: <Pine.GS0.3.93.960806102620.29977A-100000@uhunix5>

I have a \$5 check made out to Robert Ross and for the life of me I can't recall what I was going to buy from him! I thought I was buying an RCA Tips booklet from him, but I just received an email from Larry Keith who is selling RCA Tips booklets. I feel as if I'm in the Twilight Zone.

Okay guys, which one of you has the CONELRAD RCA booklet for \$5? If it's not you, Robert, then what was going to buy from you?

See what happens on the first day you decide to quit drinking coffee?

Jeff KH2PZ

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: sbrovas@tir.com (sbrovas)
Subject: sale DX Engineering T4X Processor
Message-ID: <199608060340.XAA17067@tir.com>

Hi all,

I have an exc cx DX Engineer Speech Processor LC-2T-4X. Goes with the T-4X series of Drake xmtr. This plugs into a tube socket inside the rig and works well. Price is \$100 shipped w/documentation.

73 de

Bill Rovas, WA1APX/8
sbrovas@tir.com

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: sbrovas@tir.com (sbrovas)
Subject: sale Micromatch & Bendix swr/rf couplers
Message-ID: <199608060339.XAA16834@tir.com>

Hi all,

I have two antenna couplers in nice shape.
One is a MicroMatch
2nd Bendix 280.6
These provide swr or rf power indication. Price is \$20 ea shipped.
73 de
Bill Rovas, WA1APX/8
sbrovas@tir.com

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: don merz <71333.144@CompuServe.COM>
Subject: Scope Probes
Message-ID: <960806170433_71333.144_DHB71-7@CompuServe.COM>

I'm not sure I understand 'scope probes. They seem to have a capacitance spec that is related to the lead length (more lead=more puffs). Then some 'scopes seem to want probes with a specific capacitance spec. Why?..and what goes sour when there is a mismatch between 'scope and probe? Please pass along your knowledge on this...

Thanks.
Don, N3RHT
71333.144@compuserve.com

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: steve@hi.com (Steve Byan)
Subject: Re: Scope Probes
Message-ID: <v02130511ae2d358c1b07@[140.243.30.128]>

Stan posted this back in April; I've taken the liberty of re-posting again.
-Steve

Stan says:

Here are a few words on probes, in general.

There are two common types of probes (and several uncommon types) found in use with scopes: an X1 (times one) probe and an X10 (times ten) attenuator probe.

X1 Probes: This is really just a fancy piece of coax cable with a connector on one end to connect to the scope input and a convenient tip on the other end for holding in your hand, grounding to the piece of equipment you are testing, usually with a short wire and an alligator clip, and a pointed end for hooking the probe to the point you want to get a signal from. There are no adjustments for these probes. The question is, since X1 probes are

cheaper than X10 and easy to use, why wouldn't you ALWAYS use an X1 probe?

There are a few answers: X1 probes load the circuit you are testing much more than an X10 probe both with resistance and capacitance. If the circuit can stand the loading of the probe and scope input circuitry without changing its performance, there is little reason to use an X10 probe other than possibly to keep the DC and AC voltage of the circuit under test from exceeding the input limits of the scope you are using.

X10 probes: These probes actually form a "divide by 10" frequency compensated voltage divider when used with the correct input resistance and capacitance provided by the scope input circuitry. Most scope inputs have an input resistance of 1 megohm to ground. If you place a 9 megohm resistor between the scope input and the circuit you are testing, you form a X10 divider with the two resistors. There is also some capacity from the scope input to ground and you have to adjust a variable capacitor in the probe to "compensate" it. The scope input capacity is somewhere between 10 and 40 picofarads, depending upon what model of scope we are talking about. A X10 probe has to have a variable capacitor in it with a large enough range to compensate for the scope input capacity. The P6105 has enough range to compensate to a 310A input.

The process of "compensating the probe" involves connecting the X10 probe to the scope input and applying a signal to the probe tip that contains both low and high frequencies. The squarewave calibrator built into most scopes is ideal for this use and this is not a coincidence. You then adjust the compensation capacitor on the probe so the display of squarewaves from the scope calibrator looks "square", ie: not spiked up or rolled off on the leading edge. Try it and I think it will become obvious.

Most probes are either X1 or X10. A few are switchable from one to the other and that can be an advantage. The P6105 is X10 only and if you want an X1 probe, a P6027 or P6028 are good choices for the 310 or 310A.

Over the years, I have seen a lot of non-Tek probes and most of them were pure junk. Sometimes the problems are mechanical. The environment a probe lives in is a rough one and a probe has to be tough to survive it. Most of the time, the problem with non-Tek attenuator probes was more subtle and you could not detect it without some special test equipment, specifically, a fast rise squarewave generator with enough amplitude to put several divisions of signal on the screen. How the probe reacts to a rather high amplitude, fast rise square wave is the probe's acid test. A good probe will show no spikes or ringing (damped sinewaves) on the leading edge and will have a risetime much faster than the scope itself. You need a good scope and a good generator to test a probe for this. If I had a Stack probe here, I could tell you in five minutes if I like it or not. Most of their customers will have no idea of how to tell whether it is a good probe or not. This limits the value of customer testimonials . . .

3 series Tek plugins, it's consistently 47 pF. For faster scopes, the value has to be lower, current Tek scopes are in the ballpark of 10 pF!

At DC, the 9M and 1M resistors form a 10X voltage divider.

But, at higher frequencies, the impedance of the scope input goes down due to the 47 pF. It will go from 10X at DC to 20X or worse.

So, the compensation is an adjustable capacitor in parallel with that 9 meg resistor. That keeps the voltage divider "compensated" (always 10X) from DC to the top end of the scope.

Since the trimming is never perfect on the scopes, you always need to check the compensation. This is done by adjusting for a flat top on a square wave (the calibrator).

Also, on Tek letter and 1-series plugins, the input capacitances are all over the place. No standardization between models.

Different scope probes have different ranges for the compensation cap. If there's a mismatch, you can't get the square wave square.

It's hard today to find a new probe that will work with a 47 pF scope. That's why Tek continued to make the P6006 until very recently.

Also, the probes are not as simple as I show above. The wire between the resistor and the BNC/UHF is resistance wire, to damp reflections. (Tek had a patent on that.)

Higher bandwidth probes have fancy little RCL networks at the connector, to compensate for aberrations induced elsewhere. The Tek P6008 was the first to do that, it was first offered for 85 MHz scopes like the 581/585.

Tek writes good brochures about the technology of scope probes, to sell their superior products. (I don't think that they have the patent protection they once had.)

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Re: Scope Probes
Message-ID: <199608061948.0AA23096@dlep1.itg.ti.com>

At 12:08 PM 8/6/96 -0500, Don Merz wrote:

>... Then some

>'scopes seem to want probes with a specific capacitance spec. Why?

I can't say it more eloquently than Stan, but perhaps more concisely. It's not really that the scope needs a specific capacitance probe, but rather the probe requires a specific input capacitance from the scope. This allows the capacitive divider to be set to exactly the same ratio as the resistive divider it's in parallel with. The result is a flat frequency response up to the limit of the scope.

When you calibrate your scope probe you adjust the probe internal capacitance so the overall input capacitive ratio equals the overall input resistive ratio.

Hope this helps.

Regards,
Bill Sorsby, N5BU

bill.sorsby@dlep1.itg.ti.com
Views expressed herein are no one's fault but mine.

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: AviDov@aol.com
Subject: Shure #520 Green Bullet and USN PAM-1 Portable Amp
Message-ID: <960806104953_172899522@emout18.mail.aol.com>

just came home with three(3)of these beauties in orig fcty boxes.They are high imp controlled reluctance type and the color is olive green.
Am open to sell or swap two of them for other mikes such as RS-38 or ANBMC-1 or Headsets such as TH-37 to mention a few possibilities.I don't imply here an even one on one exchange,just some audio items of current interest.
The pam-1 is a 12vdc public address system in a weather resistant case which may have been intended for beach landings.It is rugged but I haven't checked it out yet
and need some tech data or manual to guide me.Any advice is welcomed.

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: JOHN_SEHRING.parti@ecunet.org
Subject: STRANGE SWEEP GEN = PRECISION E-400

Message-ID: <9608052000.aa17881@pcusa01.ecunet.org>

I've got a Precision model E-400 sweep generator too. It's an excellent piece of gear. Large & beautiful main dial. Must have cost a pretty penny when new.

The linearity of its sweep is excellent. You can verify this by using a spectrum analyzer to look at the symmetry of the FM sidebands produced. Or use a selective communications receiver. My Sylvania and Heath sweeps are not very good in this regard.

That electro-mechanical way of getting an oscillator to sweep has been used for a long time, right up through the Heath and Eico sweep gens of the 60's.

Have a copy of the operators manual and schematic & willing to copy.

However, I don't have the service manual (which was separate). Anyone?

-John Sehring (08/04/96 1:44 pm MT @Baker, Montana) UCC wb2eqg

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "Charles R. CHIP Veres 305-532-4515" <VERESC@mail.firn.edu>
Subject: Re: stuck IF cans, need BC-224 TM, H/K, 390 knob
Message-ID: <C47ZWKRPHGCL*/R=FIRNVX/R=A1/U=VERESC/@MHS>

Bill's note brought to mind a related subject from years ago. If you feel the need to glue in an iron core for mobile or portable use, don't. Put a couple of drops of candle wax on it instead. Later, just a touch with a long-tipped soldering iron and you can adjust it. Remember, I'm only advocating this as an alternate to glue. Your base station probably doesn't need either one.

73, Chip

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: mail08458@pop.net (Bryan)
Subject: Re: The mysteries of the 6C4
Message-ID: <QQbbnc06310.199608060013@alterdial.UU.NET>

Any comments on warning in R390A manuals about not substituting a 6C4W for a 6C4?
I thought the W suffix indicates a 'ruggedized' tube. Are the electronic characteristics really different? How about the 6C4WA?

Bryan Stephens
mail08458@pop.net

On Sun, 4 Aug 1996, "Allan Fritsche" <fritsche@msn.com> wrote:
>Gang, Why in the world is a simple tube like the 6c4 such a problem.
>Interelectrode capacitance, or what.Can it be replaced?
>I know this topic was discussed in the past, Got 2 years of boat on floppies,
>but would rather not look through them.

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: Al Klase <alklase@prolog.net>
Subject: Re: Tnx for help with SX-115 & another question
Message-ID: <199608060129.VAA05492@ns1.ptd.net>

>This leads to another question - Alignment of the 50.75 KC IF requires a
>signal generator capable of generating a signal at 50.75 KC. The lowest
>that my generator will put out is 100 KC. Does anyone know of a way around
>this or have a suggestion for an alternate method of alignment?
>

If you can accurately tune the oscillator that makes the 1055KC to
50.75KC conversion, either by using a freq counter or by listening for it on
a calibrated receiver, the you should be OK feeding your test signal into
the 1055 IF.

Good luck,
Al
Al Klase - N3FRQ
alklase@prolog.net
Flemington, NJ

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: JIM_ALLEN@HP-Cupertino-om5.om.hp.com
Subject: TR-7 Information
Message-ID: <H000030e05287e26@MHS>

Item Subject: cc:Mail Text
This maybe isn't a boatanchor, but it's sort of old. I picked up a Drake
TR-7 with matching speaker and the matching power supply. The TR-7 is
painted a gray pebble finish and is in quite nice shape. The top of the
power supply and the speaker appear to have been painted black. Due to
weathering, they both have faded and the speaker is sticky to the touch.

Can someone tell me what the original color of the top of the power supply and the speaker were? Was it gloss or satin? I wonder why the speaker is sticky? I've never come across a texture like this before (some kind of special paint?).

Regards,

Jim

From boatanchors@theporch.com Tue Aug 6 01:07:43 1996
From: "Jim Berry" <basalop@eskimo.com>
Subject: Various rigs for sale ...
Message-ID: <199608060533.WAA27296@mail.eskimo.com>

Hello Toob Dudes ...

A buddy of mine who lives near Portland, Oregon has some rigs he would like to offer for sale. He has no Internet access so that can be a problem. All one can do is call him on the LL and talk to him. His name is Dan Raab (K7DR) and his phone number is 503- 647-0968.

He has:

2 NC-300's, one for parts and the other is restored. Parts radio works fine.
2 Johnson Rangers. One good one and one for parts and the parts rig works.
1 Hammerlund 779-B Super Pro.

In his note he sent me the prices were:

250 for Nationals, 175 for Johnsons and 60 for the Hammarlund. I think those prices were for a pair of radios but I cannot be sure.

He also said he had some other gear he wanted to get rid of. If you call him, you might ask what other stuff he does have.

73 Jim K7SLI

Jim Berry K7SLI. QTH: Marysville, Wa (Near Seattle)
Email: basalop@eskimo.com FAX: 360-659-1360
Ham Digital: K7SLI @ K7SLI.#NWWA.WA.USA.NA

From boatanchors@theporch.com Tue Aug 6 17:09:18 1996
From: Joseph Pinner <kc5ijd@dns1.net-connect.net>
Subject: WE 3B sounder / key
Message-ID: <199608062040.PAA03686@dns1.net-connect.net>

I do not know much about keys and sounders, so can anyone give me any information about a Western electric 3B sounder and key?

Found one at a local antique shop where we are on vacation.

What are these worth (items seem in almost new condition which seems strange). Could this be a reproduction or a restored item?

73

Joseph Pinner +
Lafayette, LA
KC5IJD
kc5ijd@net-connect.net or kc5ijd@aol.com